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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,486	03/11/2005	Olaf Joeressen	915-006.073	7159
4955 7590 12/26/2006 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER LEWIS, ALICIA M	
			ART UNIT 2164	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/26/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/527,486

Applicant(s)

JOERESSEN ET AL.

Examiner

Alicia M. Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on March 11, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Objections***

3. Claim 4 is objected to because of the following informalities: the word "least" is misspelled "last" in line 5 of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 6 recites the limitation "said selections" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

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7. Claim 9 recites the limitation "said input prediction" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13 and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 13 and 14 are not limited to tangible embodiments. Claim 13 recites a computer program product, however the product is not stored on a tangible medium, thus is not limited to a tangible product. Claim 14 recites a computer data signal embodied in a carrier wave. Signals and carrier waves are not considered tangible mediums, thus the claim is not limited to tangible embodiments. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1-3, 6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta et al. (US Patent Application Publication 2002/0149569 A1) ('Dutta') in view of Will (US Patent 6,392,640).

With respect to claims 1 and 11-15, Dutta teaches:

generating, for browsing, a character subset of said character set, said character subset including characters from among which, according to an inference logic, the next character for said word is most probably selected (paragraph 56);

displaying said character subset on a display of said electronic device, for browsing and selecting the next character by the user (paragraph 57),

characterized in that said inference logic is based on a database of words and at least one usage parameter related to each of said words (paragraphs 37, 38 and 56).

Dutta does not explicitly teach wherein said user interface is a roller, and wherein browse commands are issued by rotating the roller around its axis, and wherein select commands are issued by pressing the roller.

Will teaches entry of words with thumbwheel by disambiguation (see abstract), in which he teaches wherein said user interface is a roller, and wherein browse commands are issued by rotating the roller around its axis, and wherein select commands are issued by pressing the roller (column 2 lines 27-33).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Dutta by the teaching of Will because wherein said user interface is a roller, and wherein browse commands are issued by rotating the

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roller around its axis, and wherein select commands are issued by pressing the roller would enable a way of entering text in a device too small for a keyboard, and more specifically a way to utilize the thumbwheel more effectively to enter characters (Will, column 2 lines 6-10).

With respect to claim 2, Dutta as modified teaches wherein said at least one usage parameter for a certain word is related to the individual number of occurrences of usage of said word (Dutta, paragraph 56 lines 9-12, Will, column 13 lines 46-58).

With respect to claim 3, Dutta as modified teaches wherein said at least one usage parameter for a certain word is related to the individual number of occurrence of usages of said word and the total number of occurrence of words (Dutta, paragraph 56 lines 9-12).

With respect to claim 6, Dutta as modified teaches further comprising storing said selections in a log file for determining new usage parameters, and wherein said inference logic determines said subset of most probable characters by evaluating said log file (Dutta, paragraph 38, paragraph 57).

With respect to claim 8, Dutta as modified teaches characterized in that, the character subset is interlinked with the character set, in order to browse the characters

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on the display, such that upon browsing past the character subset, the browsing of the character set begins (Dutta, paragraph 39, paragraph 57).

With respect to claim 9, Dutta as modified teaches characterized in that said input prediction with said inference logic comprises:

identifying a start of an entry of a new word (Dutta, paragraph 38 lines 1-2),  
inserting, into the character subset, the most probable letters stored in the database of words for starting a word (Dutta, paragraph 38).

With respect to claim 10, Dutta as modified teaches:

identifying a text being entered, wherein the characters of said text relating to a word are entered (Dutta, paragraph 56),

identifying words being stored in said database of words that are appropriate for the word being entered (Dutta, paragraph 56), and

selecting, for the character subset, a character from each appropriate probable entry to be the possibly entered text (Dutta, paragraphs 38 and 56).

11. Claims 4, 5, 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta et al. (US Patent Application Publication 2002/0149569 A1) ('Dutta') in view of Will (US Patent 6,392,640) as applied to claims 1-3, 6 and 8-15 above, and further in view of Dostie et al. (US Patent Application Publication 2004/0021691 A1) ('Dostie').

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With respect to claim 4, Dutta as modified teaches wherein said at least one usage parameter and said words are stored in a database comprising words and said at least one usage parameter (Will, column 13 lines 54-58).

Dutta as modified does not teach said method further comprising adapting the contents of said database after at least one word has been selected.

Dostie teaches a method, system and media for entering data in a personal computing device (see abstract), in which he teaches further comprising adapting the contents of said database after at least one word has been selected (paragraph 214).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Dutta by the teaching of Dostie because further comprising adapting the contents of said database after at least one word has been selected would enable the database or dictionary to have learning capabilities, thus providing more functionality (Dostie, paragraph 214).

With respect to claim 5, Dutta as modified teaches characterized in that said adapting of said database is performed by adding a new word to said database (Dostie, paragraph 214).

With respect to claim 7, Dutta as modified teaches characterized in that words stored in said database of words are arranged in the form of a tree such that a root of the tree consists of a beginning of a word, the root being connected to nodes representing single characters on a next level such that on each level, potential



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characters are, in order of probability, connected to a node on a previous level whereby, as the process proceeds from the root of the tree through the nodes to a node on the last level, the characters in the nodes combine to form a word in said database of words (Dostie, Figure 4, paragraphs 88-90).

With respect to claim 16, Dutta as modified teaches wherein said processing unit is further configured to adapt the content of said database of words and said at least one parameter according to selections of a user received from said input device (Dostie, paragraphs 209-214).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Lewis whose telephone number is 571-272-5599. The examiner can normally be reached on Monday - Friday, 9 - 6:30, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alicia Lewis  
December 19, 2006



**SAM RIMELL**  
**PRIMARY EXAMINER**